11. (AMENDED) An apparatus for staining specimen slides, said apparatus comprising:

at least one slide tray holding at least one specimen slide;

an automatic staining head assembly operative to deposit reagents on said specimen slide, said automatic staining head assembly including an input device for reading identifiers that specify slide preparation protocols to perform;

a control system operatively coupled to said automatic staining head assembly for controlling said automatic staining head assembly to prepare said specimen slides during a staining run;

a pause input operative to pause said apparatus during said staining run;

and

a restart input operative to restart said apparatus after adding new specimen slides onto one of said slide trays;

wherein said control system causes said automatic staining head assembly to read a new set of dentifiers associated with said new specimen slides to add said new specimen slides to said staining run.

12. (AMENDED) The apparatus as claimed in claim 11 wherein said apparatus further comprises at least one reagent pack.

16. (AMENDED) The apparatus as claimed in claim 11 further comprising:

a stat restart input, said stat restart input for restarting said apparatus after adding new specimen slides onto one of said slide trays wherein said new specimen slides are given high priority.

27. (AMENDED) An apparatus for staining specimen slides, said apparatus comprising:

at least one slide tray, said slide tray for holding at least one specimen slide and also for holding an associated specific reagent pack, said associated reagent pack having reagents needed for processing said specimen slide; and

an automatic staining head assembly, said automatic staining head assembly for obtaining said reagents from said associated reagent pack and depositing reagents on said specimen slide.

Add new claim 28 as follows:

28. (NEW) A method to add at least one new specimen slide containing at least one identifier that specifies a slide preparation protocol to a slide rack in an autostainer containing a automatic staining head assembly coupled to a control system during a staining run comprising:

pausing said staining run by supplying a pausing input to said controlling system;

adding said new specimen slide to said slide rack;
restarting said staining run to include staining of said new specimen slides

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by supplying a restarting input to said controlling system;
wherein said controlling system causes said automatic staining head assembly to read
said identifiers contained on said new specimen slide to add said new specimen slide to
said staining run.